

| | | | | | |
|---|-----|-----|-----|---------|-----|
| 9 | 18 | 27 | 36 | 45 | 54 |
| CAG CAT TGA ACT AGA TGT CGT CCC CGC AGG CCC CAG AAG ATG GGC AGG GCT GTG | | | | | |
| | | | | M G R A | |
| 63 | 72 | 81 | 90 | 99 | 108 |
| GCG ACC GCG GCG CTT CCC CCT GGG GAC CTC CGT AGC GTC TTG GTC ACG ACC GTG | | | | | |
| A T A A L P P G D L R S V L V T T V | | | | | |
| 117 | 126 | 135 | 144 | 153 | 162 |
| CTC AAC CTC GAG CCG CTG GAC GAG GAT CTC TTC AGA GGA AGG CAT TAC TGG GTA | | | | | |
| L N L E P L D E D L F R G R H Y W V | | | | | |
| 171 | 180 | 189 | 198 | 207 | 216 |
| CCG GCC AAG AGG CTG TTT GGT GGT CAG ATC GTG GGC CAG GCC CTG GTG GCT GCA | | | | | |
| P A K R L F G G G Q I V G Q A L V A A | | | | | |
| 225 | 234 | 243 | 252 | 261 | 270 |
| GCC AAG TCT GTG AGT GAA GAC GTC CAC GTG CAC TCC CTG CAC TGC TAC TTT GTT | | | | | |
| A K S V S E D V H V H S L H C Y F V | | | | | |
| 279 | 288 | 297 | 306 | 315 | 324 |
| GCG GCA GGG GAC CCG AAG CTG CCA GTA CTG TAC CAA GTG GAG CGG ACA CGA ACA | | | | | |
| R A G D P K L P V L Y Q V E R T T | | | | | |
| 333 | 342 | 351 | 360 | 369 | 378 |
| GGG TCG AGC TTC TCG GTG CGC TCT GTG AAG GCC GTG CAA CAT GGG AAG CCC ATC | | | | | |
| G S S F S V R S V K A V Q H G K P I | | | | | |

FIG. 1A

| | | | | | | | |
|-----|---|-----|---|-----|-----|-----|-----|
| 387 | TTC ATC TGC CAG GCC TCC | 396 | TTC CAG CAG GCC CAG CCC AGC CCC ATG CAG CAC CAG | 405 | 414 | 423 | 432 |
| | F I C Q A S F Q Q A Q P S P M Q H Q | | | | | | |
| 441 | TTC TCC ATG CCC ACT GTG CCA CCA CCA GAA GAG CTG CTT GAC TGT GAG ACC CTC | 450 | 459 | 468 | 477 | 486 | |
| | F S M P T V P P P E E L L D C E T L | | | | | | |
| 495 | ATT GAC CAG TAT TTA AGG GAC CCT AAC CAA AAG AGG TAC CCA TTG GCG CTC | 504 | 513 | 522 | 531 | 540 | |
| | I D Q Y L R D P N L Q K R Y P L A L | | | | | | |
| 549 | AAC CGA ATT GCT GCT CAG GAG GTC CCC ATT GAG ATC AAG CCA GTA AAC CCA TCC | 558 | 567 | 576 | 585 | 594 | |
| | N R I A A Q E E V P I E I K P V N P S | | | | | | |
| 603 | CCC CTG AGC CAG CTG CAG AGA ATG GAG CCC AAA CAG ATG TTC TGG GTG CGA GCC | 612 | 621 | 630 | 639 | 648 | |
| | P L S Q L Q R M E P K Q M F W V R A | | | | | | |
| 657 | CGG GGC TAT ATT GGC GAG GGC GAC ATG AAG ATG CAC TGC TGC GTG GCC GCC TAT | 666 | 675 | 684 | 693 | 702 | |
| | R G Y I G E G D M K M H C C V A A Y | | | | | | |
| 711 | ATC TCC GAC TAT GCC TTC TTG GGC ACT GCA CTG CTG CCT CAC CAG TGG CAG CAC | 720 | 729 | 738 | 747 | 756 | |
| | I S D Y A F L G T A L L P H Q W Q H | | | | | | |

FIG. 1B

| | | | | | |
|---|------|------|------|------|------|
| 765 | 774 | 783 | 792 | 801 | 810 |
| AAG GTG CAC TTC ATG GTC TCA CTG GAC CAT TCC ATG TGG TTC CAC GCC CCC TTC | | | | | |
| K V H F M V S L D H S M W F H A F | | | | | |
| 819 | 828 | 837 | 846 | 855 | 864 |
| CGA GCT GAC CAC TGG ATG CTC TAT GAA TGC GAG AGC CCC TGG GCC GGT GGC TCT | | | | | |
| R A D H W M L Y E C E S P W A G G S | | | | | |
| 873 | 882 | 891 | 900 | 909 | 918 |
| CGG GGG CTG GTC CAT GGG CGG CTG TGG CGT CAG GAT GGA GTC CTA GCT GTG ACC | | | | | |
| R G L V H G R L W R Q D G V L A V T | | | | | |
| 927 | 936 | 945 | 954 | 963 | 972 |
| TGT GCC CAG GAG GGC GTG ATC CGA GTG AAG CCC CAG GTC TCA GAG AGC AAG CTG | | | | | |
| C A Q E G V I R V K P Q V S E S K L | | | | | |
| 981 | 990 | 999 | 1008 | 1017 | 1026 |
| TAG CCA GAG GTA CCA GCT TCG CCT GGG GCT TCA AGA ACC TCC CAT CTA TCC CCA | | | | | |
| 1035 | 1044 | 1053 | 1062 | 1071 | 1080 |
| TTC CTG AGA CAG GAG TTA CAG TCC CTT TTG GCC CTC ACA TCC AAT AAA GAG ACT | | | | | |
| 1089 | 1098 | | | | |
| GAT ACC ACT GGA AAA AAA | | | | | |

FIG. 1C

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|-----------|
| 1 | M | G | R | A | V | A | T | A | A | L | P | P | G | D | L | R | S | V | L | V | T | V | L | N | L | E | P | L | D | 2150905 | |
| 1 | M | S | Q | A | - | - | - | - | - | - | - | - | - | - | L | K | N | L | L | - | - | T | L | L | N | L | E | K | I | E | GI 147932 |
| 1 | M | S | - | - | - | - | - | - | - | - | - | - | - | - | L | E | K | I | L | E | L | V | P | L | S | P | T | S | F | V | GI 854594 |
| 31 | E | D | L | F | R | G | R | H | Y | W | V | P | A | K | R | L | F | G | G | Q | I | V | G | Q | A | L | V | A | A | 2150905 | |
| 19 | E | G | L | F | R | G | Q | S | E | D | L | G | L | R | Q | V | F | G | G | Q | V | V | G | Q | A | L | Y | A | A | K | GI 147932 |
| 27 | T | K | Y | L | P | A | A | P | - | - | V | G | S | K | G | T | F | G | G | T | L | V | S | Q | S | L | A | S | L | GI 854594 | |
| 61 | K | S | V | S | E | D | V | H | V | H | S | L | H | C | Y | F | V | R | A | G | D | P | K | L | P | V | L | Y | Q | V | 2150905 |
| 49 | E | T | V | P | E | R | L | V | H | S | F | H | S | Y | F | L | R | P | G | D | S | K | K | P | I | I | Y | D | V | GI 147932 | |
| 55 | H | T | V | P | L | N | F | F | P | T | S | L | H | S | Y | F | I | K | G | D | P | R | T | K | I | T | Y | H | V | GI 854594 | |
| 91 | E | R | T | R | T | G | S | S | F | S | V | R | S | V | K | A | V | Q | H | G | K | P | I | F | I | C | Q | A | S | F | 2150905 |
| 79 | E | T | L | R | D | G | N | S | F | S | A | R | V | A | A | I | Q | N | G | K | P | I | F | Y | M | T | A | S | F | GI 147932 | |
| 85 | Q | N | L | R | N | G | R | N | F | I | H | K | Q | V | S | A | Y | Q | H | D | K | L | I | F | T | S | M | I | L | F | GI 854594 |
| 121 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2150905 |
| 109 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | GI 147932 |
| 115 | A | V | Q | R | S | K | E | H | D | S | L | Q | H | W | E | T | I | P | G | L | Q | G | K | Q | P | D | P | H | R | Y | GI 854594 |
| 142 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2150905 |
| 129 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | GI 147932 |
| 145 | E | E | A | T | S | L | F | Q | K | E | V | L | D | P | Q | K | L | S | R | Y | A | S | L | S | D | R | F | Q | D | A | GI 854594 |

FIGURE 2A

167 **L****N** - **R** **I** **A** **A** **Q** **E** **V** **P** **I** **E** **I** **K** **P** **V** **N** - **P** **S** **P** **L** **S** **Q** **L** **Q** **R** **M** **E** 2150905
148 **L****K** - **D** **K** **F** **I** **C** **D** **R** **P** **L** **E** **V** **R** **P** **V** **E** **F** **H** **N** **P** **L** **K** **G** - **H** **V** **A** **E** GI 147932
175 **T** **S** **M** **S** **K** **Y** **V** **D** **A** **F** **Q** **Y** **G** **V** **M** **E** **Y** **Q** **F** **P** **K** **D** **M** **F** **Y** **S** **A** **R** **H** **T** GI 854594
195 **P** **K** **Q** **M** **F** **W** **V** **R** **A** **R** **G** **Y** **I** **G** **E** **G** **D** **M** - - - - - **K** **M** **H** **C** 2150905
176 **P** **H** **R** **Q** **W** **I** **R** **A** **N** **G** **S** **V** **P** **D** - **D** **L** - - - - - **R** **V** **H** **Q** GI 147932
205 **D** **E** **L** **D** **Y** **F** **V** **K** **V** **R** **P** **P** **I** **T** **V** **E** **H** **A** **G** **D** **E** **S** **S** **L** **H** **K** **H** **H** **P** GI 854594
217 **C** **V** **A** **A** - - - - - - - - - - **Y** **I** **S** **D** **Y** **A** **F** **L** **G** **T** **A** **L** **L** **P** 2150905
197 **Y** **L** **L** **G** - - - - - - - - - - **Y** **A** **S** **D** **L** **N** **F** **L** **P** **V** **A** **L** **Q** **P** GI 147932
235 **Y** **R** **I** **P** **K** **S** **I** **T** **P** **E** **N** **D** **A** **R** **Y** **N** **Y** **V** **A** - **F** **A** **Y** **L** **S** **D** **S** **Y** **L** **L** GI 854594
235 **H** **Q** - - - **W** **Q** **H** **K** **V** - - - - - **H** **F** **M** **V** **S** **L** **D** **H** **S** **M** **W** **F** **H** **A** **P** **F** 2150905
215 **H** **G** **I** **G** **F** **L** **E** **P** **G** **I** - - - - - **Q** - **I** **A** **T** **I** **D** **H** **S** **M** **W** **F** **H** **R** **P** **F** GI 147932
264 **L** **T** **I** **P** **Y** **F** **H** **N** **L** **P** **L** **Y** **C** **H** **S** **F** **S** **V** **S** **L** **D** **H** **T** **I** **Y** **F** **H** **Q** **L** **P** GI 854594
258 **R** **A** **D** **H** **W** **M** **L** **Y** **E** **C** **E** **S** **P** **W** **A** **G** **G** **S** **R** **G** **L** **V** **H** **G** **R** **L** **W** - **R** **Q** 2150905
240 **N** **L** **N** **E** **W** **L** **L** **Y** **S** **V** **E** **S** **T** **S** **A** **S** **S** **A** **R** **G** **F** **V** **R** **G** **E** **F** **Y** - **T** **Q** GI 147932
294 **H** **V** **N** **N** **W** **I** **Y** **L** **K** **I** **S** **N** **E** **P** **R** **S** **H** **W** **D** **K** **H** **L** **V** **Q** **G** **K** **Y** **F** **D** **T** **Q** GI 854594
287 **D** **G** **V** **L** **A** **V** **T** **C** **A** **Q** **E** **G** - **V** **I** **R** **V** **K** **P** **Q** **V** **S** **E** **S** **K** **L** 2150905
269 **D** **G** **V** **L** **V** **A** **S** **T** **V** **Q** **E** **G** - **V** **M** **R** - - - - - **N** **H** **N** GI 147932
324 **S** **G** **R** **I** **M** **A** **S** **V** **S** **Q** **E** **G** **Y** **V** **V** **G** **S** **E** **R** **D** **I** **R** **A** **K** **F** GI 854594

FIGURE 2B

108101-9839209

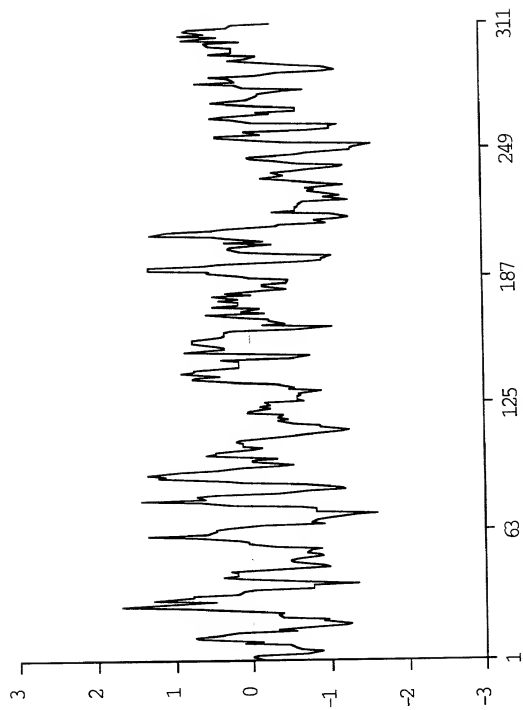


FIGURE 3A

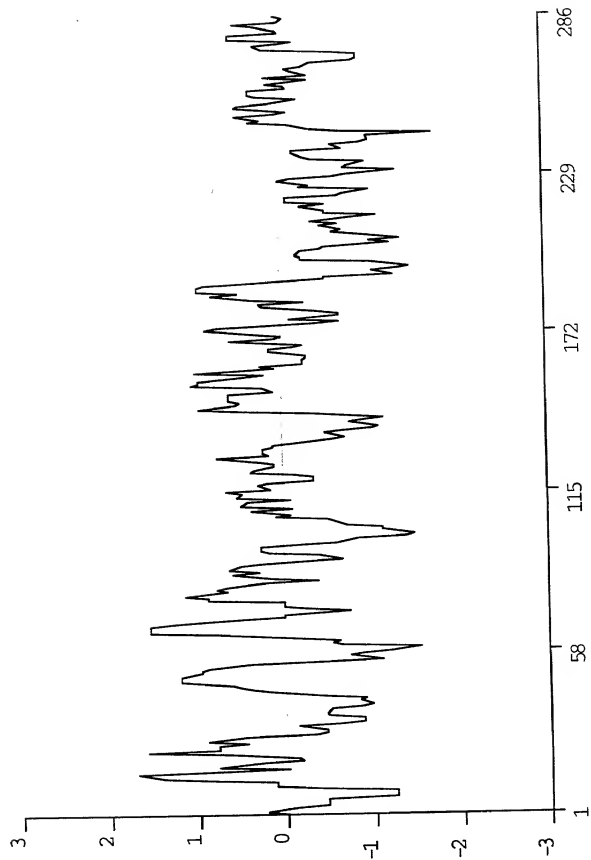


FIGURE 3B